



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/522,895

02/01/2005

Francois Gueissaz

ICB0205

2157

24203

7590

12/31/2007

GRIFFIN & SZIPL, PC

SUITE PH-1

2300 NINTH STREET, SOUTH

ARLINGTON, VA 22204

EXAMINER

KAYES, SEAN PHILLIP

ART UNIT

PAPER NUMBER

2833

MAIL DATE

DELIVERY MODE

12/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/522,895	GUEISSAZ, FRANCOIS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sean Kayes	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 13-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/12/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13-14, 17, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ganster et al. (WO 94/14133.) (With regard to claim 17, evidence for an inherency argument is provided by Sandvik {US 20050097941.})

3. With respect to claim 13, Ganster discloses a device disposed to monitor for water resistance of a case, sealed in a water resistant manner (figure 7 shows wherein a fluid {72} is secured in a resistant manner. Additionally, the last paragraph on page 7 discusses figure 7 and in doing so refers to element 72 as "Flussigkeit" which translates to English as fluidness/liquidness.), of an electronic timepiece (3 figure 1 "Zeit/Datum" ~ Time/Date: as translated by applicant. See translated abstract provided by applicant: "together with tune and data information provided by a time and date keeping unit (3)."), the timepiece including a time base for generating a standard frequency signal (a time keeping unit inherently has a time base in order to function as a time keeping unit), a central processing unit (1 and 8 figure 1) for determining the time from the standard signal, and an electronic means for generating an alarm (See translated abstract and 15 and 2 figure 1), wherein the device includes:

- an electronic sensor (see translated abstract and 5 figure 1) disposed to measure fluctuations in a concentration of a gas ("gas detektor" ~ gas detector as translated by applicant) in atmosphere contained in the case, wherein results of the measurement carried out by the electronic sensor (5 figure 1) are processed by the central processing unit (1 and 8 figure 1) and, in response to receiving a measurement signal from the electronic sensor when the case is no longer sealed in a water resistant manner, the electronic means for generating an alarm emits (see translated abstract), if necessary, an acoustic warning alarm or a visual warning alarm. (Ganster does not teach emitting an acoustic or a visual alarm. However, the wording "if necessary" indicates that this is an optional limitation.)

4. With respect to claim 14, Ganster discloses the device according to claim 13, wherein the sensor includes means (5 figure 1) for measuring said concentration continuously or intermittently and generating an alarm signal as soon as the sensor detects a fluctuation in the value of the concentration of the gas greater than a predetermined value (see abstract.)

5. With respect to claim 17, Ganster discloses the device according to claim 13, wherein the sensor includes electrical heating means (the gas sensor is an electrical apparatus which inherently generates heat) whose role is to keep a thermally and electrically insulated membrane at a constant temperature.

Sandvik (paragraph 47) teaches that a gas sensor in and of itself can be operated as a heating means.

6. With respect to claim 26, Ganster discloses an electronic timepiece, comprising:

- (a) a time base (3 figure 1 "Zeit/Datum" ~ Time/Date: as translated by applicant.

See translated abstract provided by applicant: "together with tune and data information provided by a time and date keeping unit (3)." for generating a standard frequency signal;

- (b) a central processing unit (8 figure 1) for determining time from the standard signal;

- (c) an electronic means for generating an alarm (2 figure 1; the memory records the variation from the thresholds. The recording of the alert constitutes the alarm); and

- (d) a device (5 figure 1) disposed to monitor water resistance of a case, sealed in a water resistant manner (figure 7), of the electronic timepiece, wherein the device includes an electronic sensor (5 figure 1) disposed to measure fluctuations in a concentration of a gas in atmosphere contained in the case, wherein results of the measurement carried out by the electronic sensor are processed by the central processing unit and, in response to receiving a measurement signal from the electronic sensor when the case is no longer sealed in a water resistant manner, the electronic means for generating an alarm emits, if necessary, an acoustic warning alarm or a visual warning alarm, wherein

the electronic timepiece is a watch (Ganster does not teach emitting an acoustic or a visual alarm. However, the wording "if necessary" indicates that this is an optional limitation.)

7. Claims 18-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Mayer (US 6450012.)

8. With respect to claim 18, Mayer teaches a method of monitoring the water resistance of a case of a timepiece, wherein the method includes the steps of:

- introducing a gas (28 figure 1a) with an initial concentration into the atmosphere contained in the case of the timepiece so that the gas is sealed in the case;
- measuring an initial concentration of the gas (34 figure 1a; and column 5 lines 25-30);
- continuously or intermittently measuring the concentration of the gas (figure 1a; lines 25-45 indicate a continuous operation. However, the device is clearly intended to be operated on more than one device which would constitute an intermittent detection.); and
- generating an alarm (38 and "alarm" figure 1a; and column 5 lines 29-33) when the measured concentration of the gas is different from the initial concentration of the gas or when a leak rate exceeds a predetermined value.

9. With respect to claim 19, Mayer teaches the method according to claim 18, wherein before measuring the concentration of gas, the-ambient temperature is measured (34 figure 1; column 3 lines 47-57; and column 5 lines 10-38.)

10. With respect to claim 20, Mayer teaches the method according to claim 18, wherein the case is filled with gas by opening the case, filling the case with gas, then sealing the case in a water resistant manner (column 5 lines 10-22.)

11. With respect to claim 21, Mayer teaches the method according to claim 18, wherein an enclosed space (12 figure 1a) is filled with gas via a valve (60 figure 1a.)

12. With respect to claim 22, Mayer teaches the method according to claim 18, wherein the gas present in the atmosphere of the enclosed case is an inert gas (claim 4.)

13. With respect to claim 23, Mayer teaches the method according to claim 22, wherein the concentration of inert gas in the atmosphere of the enclosed case is greater than their concentration of the inert gas in the-ambient air (column 5; the sensor 34 operates once a concentration is above a certain threshold. The purge operation is performed by means of ambient air 46 figure 1a. Subsequently in order to operate the gas source 28 figure 1a must have concentrations of the gas above that present in the ambient air.)

14. With respect to claim 24, Mayer teaches the method according to claim 22, wherein the inert gas is carbon dioxide (column 5 lines 10-20) or helium.

15. With respect to claim 25, Mayer teaches the method according to claim 23, wherein the inert gas is carbon dioxide (column 5 lines 10-20) or helium.

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ganster et al. (WO 94/14133.)

With respect to claim 16, it is not clear if Ganster teaches an enclosed space provided with a valve for forcing gas therein.

Ganster teaches an enclosed space with gas and liquid (figure 7.) The gas and liquid must enter the enclosed space by some means.

A dictionary definition for the word valve is "any device for halting or controlling the flow of a liquid, gas, or other material through a passage, pipe, inlet, outlet, etc."

Thus any device that achieves the result depicted in figure 7 is a valve.



At the time of the invention it would have been obvious to one skilled in the art to use a valve to insert the gas and liquid into Ganster's device. The reason for doing so would have been to achieve the structure depicted in figure 7 of Ganster's disclosure.

18. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ganster (WO 94/14133) in view of Hatfield (US 6117393.)

19. With respect to claim 15, Ganster teaches the device according to claim 14. Ganster does not teach the electronic sensor includes a differential measuring bridge. The use of a differential measuring bridge with a gas sensor is very common and well-known in the art.

Hatfield provides a discussion of the basic state of the art of gas sensors (column 1). Hatfield states that "typically, gas sensing devices use both a catalyzed sensor and a non-catalyzed reference sensor. The two sensors are typically coupled in a Wheatstone bridge arrangement. Gas concentration can be determined by measuring the difference in voltage drop across the catalyzed and non-catalyzed coated conductors.

At the time of the invention it would have been obvious to one skilled in the art to use a differential measuring bridge as/with a gas sensor in Ganster's device as taught by Hatfield. The reason for doing so would be to choose a common and well known method of achieving a gas detecting circuit as taught by Hatfield.

***Response to Arguments***

20. Applicant's arguments with respect to claims 13-26 have been considered but are moot in view of the new ground(s) of rejection.

21. Applicant's arguments with regard to the 112 rejections of the previous action dated 6/13/2007 are persuasive. The amendments to the claims remedy the problems.

***Conclusion***

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Kayes whose telephone number is (571) 272-8931. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley Paula can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SK  
12/20/2007



**RENEE LUEBKE**  
**PRIMARY EXAMINER**